

Additional file 2: Summary of explanatory variables, indicators, and data collection methods*

Variable	Definition	Method	Final Study Indicators
Perceived external support	The alignment of network agendas and facilitatory relationships with stakeholders external to the network, including NSW Health, AHS, and hospital management and staff.	Internet survey	<p>A network wide mean was calculated from the total scores of the Perceived external support domain of the internet survey which was completed by network members (Likert scale):</p> <ul style="list-style-type: none"> • Support from hospital management • Awareness of and support for network ideas and quality improvement activities by AHS Managers • Willingness of hospital clinicians to implement changes recommended by network • Awareness of network recommendations by NSW Health • Network work plans and agendas aligned with state government strategic plans
Perceived leadership	<p>Strength and quality of the sub-categories of transformational and/or transactional leadership of the network, including network managers, co-chairs, and the ACI executive across six key aspects:</p> <p><u>Transformational leadership:</u></p> <ul style="list-style-type: none"> • Vision and facilitation • Motivation and role model • Building collaborative relationships and engaging with the external environment <p><u>Transactional leadership:</u></p> <ul style="list-style-type: none"> • Clearly defined goals and achievable work plans • Ability to implement change 	Internet survey	<p>A network wide mean was calculated from the total scores of sub-categories of the Perceived leadership domain of the internet survey which was completed by network members (Likert scale).</p> <p>Where the sub-categories of leadership were highly correlated (i.e. for Leadership of network co-chairs and ACI executives) only one combined score for transformational and transactional leadership was used in the analysis of their relationship with outcome variables. Where there was low correlation between these sub-categories (i.e. for Leadership of network manager), analysis was performed separately.</p>

Strategic and operational management of a network	<p>The efficiency of the internal management of the networks across the following dimensions:</p> <ul style="list-style-type: none"> • Composition of the network executive committee • Number of network meetings • Open and facilitative approach to management • Clearly stated written governance and decision-making processes (i.e. a strategic plan) • Effective internal and external communication and organisational processes. 	Document audit of network meeting minutes and memberships	<p>From document audit:</p> <ul style="list-style-type: none"> • Number of disciplines represented on the network executive committee • Number of meetings over the study period • Whether networks had a strategic plan: Yes/No
		<p>Internet survey</p> <p>Separate analyses were conducted using Strategic and operational management of a network signified by number of meetings (from document review) and Strategic and operational management of a network – internet survey summary score (from internet survey) .</p>	<p>A network wide mean was calculated from the total scores of the Strategic and operational management of a network domain of the internet survey which was completed by network members (Likert scale):</p> <ul style="list-style-type: none"> • Perceived multidisciplinary representation • Perceived dominance of individuals • Network environment perceived as supportive • Perceived effectiveness of information sharing across the network • Perceived effectiveness of communication with people outside the network • Perceived organisational ability of the Network Manager

NSW = New South Wales; AHS = Area Health Services (local administrative regions where hospitals and other services are administered, now called Local Health Districts); ACI = NSW Agency for Clinical Innovation (statutory health organisation that is responsible for the clinical networks); *This table has been updated since first published (Haines M et al, *Determinants of successful clinical networks: the conceptual framework and study protocol*. Implement Sci, 2012. 7: p. 16). There are discrepancies between the initial indicative pilot indicators and what was feasible to collect with accuracy in the main study. Henceforth, consider this updated table to be the final record of what was measured in the study. Specifically, we did not measure how well networks successfully implemented ‘well-designed quality-improvement initiatives’. We also changed the name of one variable from ‘internal management’ to ‘strategic and operational management of a network’.

